

Remarks

Claims 1-7 and 22-32 are in the application, of which claim 1 is in independent form. Claims 1-3, 7, and 26-32 are amended.

The Office action has rejected claims 1, 2, 7, and 25-32 under 35 U.S.C. 112 for being indefinite. Applicant responds as follows.

Claims 1, 2, 7, and 25-32 have been amended to address these issues. In particular, “may” has been removed except where optional substitution is recited, and the claims have been corrected to form single sentences. Also, the average molecular weight has been designated as weight average molecular weight. Applicants request, therefore, that this rejection be withdrawn.

The Office action has rejected claims 1, 5, 22, 26, and 29 under 35 U.S.C. 103(a) for obviousness over Parish (U.S. 5,302,652) and Kuromatsu et al. (JP 2002-105200) or Yin et al. (*Chem. Let.*, Vol. 32 N4 (2002), pp 328-329). Applicant responds as follows.

The polyimide resin of the present invention is particularly useful as an electrolyte of a fuel cell or the like. The electrolyte comprising the polyimide resin of the present invention has improved proton conductivity, hydrolytic stability, and oxidation stability.

In contradistinction, Parish is directed to a polyimide shaped article, e.g. a sheet or film. The polyimide of Parish may include an aliphatic group in its main chain, but is not directed to an electrolyte. Therefore, Parish does not teach or imply the improvements in the proton conductivity, hydrolytic stability, and oxidation stability, which are important to an electrolyte.

Further, Kuromatsu and Yin do not disclose or imply an imide bond wherein a main chain consists of an aliphatic group, and do not also teach or imply the improvements in hydrolytic stability and oxidation stability by introducing an aliphatic polyimide group.

Therefore, the effects of the present invention, i.e., the improvements in proton conductivity, hydrolytic stability, and oxidation stability are unexpected from Parish and Kuromatsu or Yin.

Consequently, Claims 1-5, 22, 26, and 29 are not obvious from Parish and Kuromatsu or Yin. Applicants request, therefore, that this rejection be withdrawn.

The Office action has rejected claims 6, 22-25, and 30-32 under 35 U.S.C. 103(a) for obviousness over Parish in view of Kuromatsu or Yin and in further view of Lee et al. (U.S. 7,157,548). Applicant responds as follows.

As mentioned above, Claims 1-3 are not obvious from Parish and Kuromatsu or Yin. Further, Lee does not also disclose or imply the imide bond wherein the main chain consists of the aliphatic group, and does not also teach or imply the improvements in the hydrolytic stability and oxidation stability by introducing the aliphatic polyimide group.

Therefore, the effects of the present invention are also unexpected from Parish and Kuromatsu or Yin.

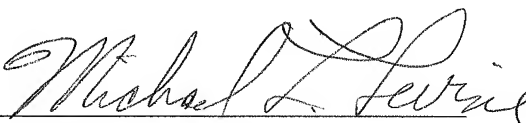
Consequently, Claims 6, 23-25, and 30-32 dependent on Claims 1-3 are not also obvious from Parish, Lee, and Kuromatsu or Yin. Applicants request, therefore, that this rejection be withdrawn.

Applicant believes the application is in condition for allowance and respectfully requests the same.

Applicant believes that no fee is required in connection with filing of this amendment or any of the enclosed papers. However, in the event that a fee is required, applicant hereby authorizes the Director to charge required fees to USPTO Deposit Account No. 19-4455.

Respectfully submitted,

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